

ABSTRACT

The disclosed invention is a novel polarized light source. The polarized light source of this invention includes an organic electroluminescent (OEL) device or an organic photoluminescent (PL) device and a cholesteric liquid crystal (CLC) polarizing device. The polarized light source of the present invention is an efficient, high purity, and bright source of polarized light. Further, the present invention enables a polarized light source to be custom designed with a polarization bandwidth and position across a wide range of wavelengths. Further still, the light source of this invention is made from low cost materials and is easily manufactured. Yet further still, this invention enables the production of ultra-thin and lightweight polarized light sources.